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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/468,647	12/21/99	GORDON R	B0192/7011

HM22/0323

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EXAMINER	
ANDRES, J	
ART UNIT	**PAPER NUMBER**
1646	9

DATE MAILED: 03/23/01

Please find below and/or attached an Office communication concerning this application or proceeding.

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03/23/01

Office Action Summary	Application No. 09/468,647	Applicant(s) GORDON ET AL.	
	Examiner Janet L Andres	Art Unit 1646	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-72 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) _____ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claims 1-72 are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

15) ☐ Notice of References Cited (PTO-892)
16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
18) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
19) ☐ Notice of Informal Patent Application (PTO-152)
20) ☐ Other:

DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-4, 6, 7, 11, 12, 14, 15, 21, 30, 31, 39-44, 54-56, and 72, drawn to polynucleotides and means of expression, classified in class 435, subclasses 69.1, 320.1, and 235, and class 536, subclass 23.5.

II. Claims 5, 13, 16, 32, 35, 63, and 64, drawn to antisense molecules, classified in class 514, subclass 44.

III. Claims 8-10, 19, 20, 48, 49, 58, 59, and 71, drawn to polypeptides, classified in class 530, subclass 350.

IV. Claims 17, 18, and 65-67, drawn to transgenic animals and cells, classified in class 435, subclass 55, and class 800, subclass 8.

V. Claims 22-24 and 68-70, drawn to antibodies, classified in class 530, subclass 388.1 and 389.1.

VI. Claims 25 and 26, drawn to immunoassays, classified in class 435, subclass 7.1.

VII. Claim 27, drawn to a method of identifying a modulator of VEGF, classified in class 435, subclass 7.1.

VIII. Claims 28 and 29, drawn to modulators of VEGF, classified in class 530, subclass 350.

IX. Claims 33, 34, and 36, drawn to immunotherapy, classified in class 424, subclass 130.1.

X. Claims 37, 38, and 57, drawn to methods of enhancing angiogenesis, classified in class 514, subclass 2, and class 435, subclass 455.

XI. Claim 52, drawn to a method of inhibiting angiogenesis, classified in class 514, subclass 2.

XII. Claims 50 and 60, drawn to a method of identifying a modulator of a VEGF receptor, classified in class 435, subclass 7.21.

XIII. Claim 51, drawn to a modulator of a VEGF receptor, classified in class 530, subclass 350.

XIV. Claim 53, drawn to a method of identifying a protein using a nucleic acid, classified in class 435, subclass 7.1.

XV. Claims 61 and 62, drawn to a method of inhibiting angiogenesis by administration of VEGF or a nucleic acid, classified in class 514, subclasses 2 and 44, and 435, subclass 455.

The inventions are distinct, each from the other because of the following reasons:

The polynucleotides of Invention I are distinct from the antisense molecules of Invention II because they have different uses, can not be used together or interchangeably, and require different considerations.

The polynucleotides of Invention I are not related to the polypeptides of Invention III. They differ structurally and functionally, can not be used together or interchangeably, and have non-coextensive searches and considerations.

The polynucleotides of Invention I are distinct from the transgenic animals of Invention IV. They have other uses, such as the generation of protein, and the transgenic animals have concerns different from those of the polynucleotides.

The polynucleotides of Invention I are not related to the antibodies of Invention V. They differ structurally and functionally, can not be used together or interchangeably, and have non-coextensive searches and considerations.

The polynucleotides of Invention I are not related to the assays of Invention VI. They can not be used in or detected by these assays.

The polynucleotides of Invention I are distinct from the methods of Invention VII. They have other uses, such as the generation of polypeptides.

The polynucleotides of Invention I are unrelated to the compounds of Invention VIII. They are chemically and physically distinct, can not be used together or interchangeably, and have non-coextensive searches and considerations.

The polynucleotides of Invention I are not related to the methods of Invention IX. They can not be used in these methods.

The polynucleotides of Invention I are distinct from the methods of Invention X because they have other uses, such as the generation of polypeptides.

The polynucleotides of Invention I are not related to the methods of Invention XI and XII. They can not be used in these methods.

The polynucleotides of Invention I are not related to the modulators of Invention XIII. They differ structurally and functionally, can not be used together or interchangeably, and have non-coextensive searches and considerations.

The polynucleotides of Invention I are distinct from the methods of Invention XIV because they have other uses, such as the generation of polypeptides.

The polynucleotides of Invention I are not related to the methods of Invention XV. They can not be used in these methods.

The antisense molecules of Invention II are not related to the polypeptides of Invention III. They differ structurally and functionally, can not be used together or interchangeably, and have non-coextensive searches and considerations.

The antisense molecules of Invention II are not related to the transgenic animals of Invention IV. They can not be used in the production of these animals.

The antisense molecules of Invention II are not related to the antibodies of Invention V. They differ structurally and functionally, can not be used together or interchangeably, and have non-coextensive searches and considerations.

The antisense molecules of Invention II are not related to the assays of Invention VI. They can not be used in these assays.

The antisense molecules of Invention II are not related to the methods of Invention VII. They can not be used in these methods.

The antisense molecules of Invention II are distinct from the modulators of Invention VIII. The antisense molecules have other uses, such as hybridization, and other compounds, such as proteins and small molecules, are encompassed by Invention VIII.

The antisense molecules of Invention II are not related to the methods of Invention IX-XII. They can not be used in these methods.

The antisense molecules of Invention II are not related to the modulators of Invention XIII. They are chemically and physically distinct entities and are not capable of use together.

The antisense molecules of Invention II are distinct from the methods of Invention XIV. They have other uses, such as therapeutic uses.

The antisense molecules of Invention II are distinct from the methods of Invention XV. They can not be used in these method.

The polypeptides of Invention III are not related to the transgenic animals of Invention IV. They can not be used to generate these animals, nor can they be used together with these animals.

The polypeptides of Invention III are not related to the antibodies of Invention V. They differ structurally and functionally, can not be used together or interchangeably, and have non-coextensive searches and considerations.

The polypeptides of Invention III distinct from the assays of Invention VI. They can be identified by other methods, such as purification.

The polypeptides of Invention III are distinct from the methods of Invention VII. They have other uses, such as the generation of antibodies.

The polypeptides of Invention III are not related to the modulators of Invention VIII. They differ structurally and functionally, can not be used together or interchangeably, and have non-coextensive searches and considerations.

The polypeptides of Invention III are not related to the immunotherapy of Invention IX. They can not be used in these methods.

The polypeptides of Invention III are distinct from the methods of Inventions X-XII. They have other uses, such as the generation of antibodies.

The polypeptides of Invention III are not related to the compounds of Invention XIII. They can not be identified by the methods used to identify these compounds and can not be used together or interchangeably with these compounds.

The polypeptides of Invention III are distinct from the methods of Invention XIV. They can be identified in other ways, such as by antibodies,

The polypeptides of Invention III are distinct from the methods of Invention XV. They have other uses, such as the generation of antibodies.

The transgenic animals of Invention IV are not related to the antibodies of Invention V. They differ structurally and functionally, can not be used together or interchangeably, and have non-coextensive searches and considerations.

The transgenic animals of Invention IV are not related to the methods of Invention VI and VII. They can not be used in these methods.

The transgenic animals of Invention IV are not related to the modulators of Invention VIII. They differ structurally and functionally, can not be used together or interchangeably, and have non-coextensive searches and considerations.

The transgenic animals of Invention IV are not related to the methods of Invention IX-XII. They can not be used in any of these methods.

The transgenic animals of Invention IV are not related to the modulators of Invention XIII. They differ structurally and functionally, can not be used together or interchangeably, and have non-coextensive searches and considerations.

The transgenic animals of Invention IV are not related to the methods of Invention XIV and XV. They can not be used in these methods.

The antibodies of Invention V are distinct from the methods of Invention VI. They have other uses, such as protein purification.

The antibodies of Invention V are distinct from the methods and compounds of Inventions VII-IX because they can be identified in other ways, such as by purification, and used for other purposes, such as protein purification.

The antibodies of Invention V are not related to the methods of Inventions X and XI. They can not be used in these methods.

The antibodies of Invention V are not related to the methods of Invention XII. They can not be used in or detected by these methods.

The antibodies of Invention V are not related to the modulators of Invention XIII. They differ structurally and functionally and have non-coextensive searches and considerations.

The antibodies of Invention V are not related to the methods of Inventions XIV and XV. They can not be used in either of these methods.

The immunoassays of Invention VI are not related to the methods of Invention VII. They are different methods with different steps, reagents, considerations, and goals.

The immunoassays of Invention VI are not related to the modulators of Invention VIII. They can not be used to identify these modulators.

The immunoassays of Invention VI are not related to the methods of Inventions IX-XII. They have different steps, require different reagents, and have different goals and outcome measures.

The immunoassays of Invention VI are not related to the modulators of Invention XIII. They can not be used to identify these modulators.

The immunoassays of Invention VI are not related to the methods of Inventions XIV and XV. They have different steps, require different reagents, and have different goals and outcome measures.

The methods of Invention VII are distinct from the modulators of Invention VIII, because the modulators of Invention VIII can be identified in other ways, such as protein purification.

The methods of Invention VII are distinct from the methods of Inventions IX-XII. They have different steps, require different reagents, and have different goals and outcome measures.

The methods of Invention VII are not related to the modulators of Invention XIII. They can not be used to identify modulators of a receptor.

The methods of Invention VII are not related to the methods of Inventions XIV and XV. They have different steps, require different reagents, and have different goals and outcome measures.

The modulators of Invention VIII are not related to the methods of Inventions IX -XV. The modulators can not be used in any of these methods.

The methods of Invention IX are not related to the methods of Inventions X-XII. They have different steps, require different reagents, and have different goals and outcome measures.

The methods of Invention IX are not related to the modulators of Invention XIII. The modulators of Invention XIII can not be used in the methods of Invention IX.

The methods of Invention IX are not related to the methods of Inventions XIV and XV. They have different steps, require different reagents, and have different goals and outcome measures.

The methods of Invention X are not related to the methods of Invention XI and XII. They have different steps, require different reagents, and have different goals and outcome measures.

The methods of Invention X are not related to the modulators of Invention XIII. The modulator of Invention XIII can not be used in these methods.

The methods of Invention X are not related to the methods of Invention XIV and XV. They have different steps, require different reagents, and have different goals and outcome measures.

The methods of Invention XI are not related to the methods of Invention XII. They have different steps, require different reagents, and have different goals and outcome measures.

The methods of Invention XI are not related to the compounds of Invention XIII. The compounds of Invention XIII can not be used in the methods of Invention XI.

The methods of Invention XI are not related to the methods of Invention XIV and XV. They have different steps, require different reagents, and have different goals and outcome measures.

The methods of Invention XII are distinct from the modulators of Invention XIII. The modulators of Invention XIII can be identified in other ways, such as protein purification.

The methods of Invention XII are not related to the methods of Inventions XIV and XV. They have different steps, require different reagents, and have different goals and outcome measures.

The modulators of Invention XIII are not related to the methods of Inventions XIV and XV. They can not be used in either of these methods.

The methods of Invention XIV are distinct from the methods of Invention XV. They have different steps, require different reagents, and have different goals and outcome measures.

Because these inventions are distinct for the reasons given above and the search required for the different Groups are not coextensive, restriction for examination purposes as indicated is proper.

This application contains claims directed to the following patentably distinct species of the claimed invention:

For Group X, the species are:

a) protein

b) nucleic acid

These are chemically and physically distinct species with different mechanisms of action and different concerns. Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claim 37 is generic.

For Groups XII and XIII, the species are:

a) VEGF receptor

b) neuropilin 1 receptor

c) neuropilin 2 receptor

These are different molecules with different functions. Molecules identified using the different receptors would thus be different species with different characteristics. Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable.

For Group XV, the species are:

a) protein

b) nucleic acid

These are chemically and physically distinct species with different mechanisms of action and different concerns. Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to

be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Janet Andres, Ph.D., whose telephone number is (703) 305-0557. The examiner can normally be reached on Monday through Friday from 8:00 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yvonne Eyler, Ph.D., can be reached at (703) 308-6564. The fax phone number for this group is (703) 305-3014 or (703) 308-4242.

Communications via internet mail regarding this application, other than those under U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to **[yvonne.eyler@uspto.gov]**.

All Internet email communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark Office on February 25, 1997 at 1195 OG 89.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0196.

Janet Andres, Ph.D.
March 22, 2001

Yvonne Eyler

YVONNE EYLER, PH.D
SUPERVISORY PATENT EXAMINER
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